

CLAIMS**I CLAIM:**

1. A breadboard comprising a plate made of an insulating material and having a connection strip portion including a grouping of at least three rows of sets of at least three spaced apart holes in each set in the plate, the centers of the holes in each set being spaced from each other by a predetermined distance defined as a space, groups of at least three connector clips in the plate each connected in at least a three gang grouping, each grouping being referred to as a conductive strip which is aligned with and beneath one of the rows of sets of holes with all conductive strips being electrically isolated from each other, and all said conductive strips in each row being offset from the conductive strip in an adjacent row by said predetermined distance and the sets being aligned in each row, end-to-end, with one space between end holes of two adjacent sets in a row, and each row being offset or staggered from each adjacent row by at least one space such that an array of spaces is formed, with each interior space in the middle row forming a center of a diamond shaped four pin socket, that has a connector clip in the plate at each of its four points or corners, that originates from a different conductive strip.
- 20 2. The breadboard of claim 1 wherein said space is approximately 0.1 inch.
3. The breadboard of claim 1 combined with a terminal strip portion in said plate comprising at least one elongate grouping of transversely extending rows of holes, with each row containing three to seven holes, a conductive strip of connector clips situated in the plate beneath each row, each hole defining an electrical contact point on the conductive strip, with all of the conductive strips being electrically isolated from each other, and the adjacent holes having a predetermined center-to-center spacing between them.
- 30 4. The breadboard of claim 3 comprising two elongate groupings of transversely extending rows of holes.

5. The breadboard of claim 4 wherein the two groupings are spaced apart a distance which will result in an end hole in one row of holes in one grouping of rows of holes having a center-to-center distance of approximately 0.3 inch with the closest end hole in a row of holes in the other grouping of rows of 5 holes.

6. The breadboard of claim 3 wherein the center-to-center spacing between adjacent pinholes is approximately 0.1 inch.

10 7. The breadboard of claim 3 wherein each row comprises five spaced apart pinholes.

15 8. The breadboard of claim 1 combined with a distribution strip portion comprising at least one line of groups of spaced apart holes in the plate, each group comprising three to seven holes with adjacent holes being separated by a predetermined center-to-center spacing and the end holes in adjacent end-to end groups being spaced apart by said spacing.

9. The breadboard of claim 8 wherein said center-to-center spacing 20 is approximately 0.1 inch.

10. The breadboard of claim 1 wherein each set of holes includes at least four holes and each group of connection clips include at least four clips in a four gang grouping.

25 11. The breadboard of claim 1 wherein each set of pinholes includes at least five pinholes and each group of connection clips include at least five clips in a five gang grouping.

30 12. A breadboard comprising a plate made of an insulating material and having a connection strip portion including a grouping of at least three rows of sets of at least three spaced apart holes in each set in the plate, the centers of the holes in each set being spaced from each other by a predetermined distance defined as a space, groups of at least three connection clips in the plate each

connected in an at least a three gang grouping, each grouping being referred to as a conductive strip which is aligned with and beneath one of the rows of sets of holes with all conductive strips being electrically isolated from each other, and all said conductive strips in each row being offset from the conductive strip in an adjacent row by said predetermined distance and the sets being aligned in each row, end-to-end, with one space between end holes of two adjacent sets in a row, and each row being offset or staggered from each adjacent row by at least one space such that an array of spaces is formed, with each interior space in a middle row forming a center of a diamond shaped four pin socket, that has a conductive clip in the plate at each of its four points or corners, that originate from a different conductive strip, a terminal strip portion in said plate comprising at least one elongate grouping of transversely extending rows of holes, with each row containing three to seven holes, a conductive strip of connector clips situated in the plate beneath each row, each hole defining an electrical contact point on the conductive strip, with all of the conductive strips being electrically isolated from each other, and the adjacent holes having a predetermined center-to-center spacing between them and a distribution strip portion comprising at least one line of groups of spaced apart holes in the plate, each group comprising three to seven holes with adjacent holes being separated by a predetermined center-to-center spacing and the end holes in adjacent end-to end groups being spaced apart by said spacing.

13. The breadboard of claim 12 wherein the terminal strip portion comprises two elongate groupings of transversely extending rows of holes.

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14. The breadboard of claim 13 wherein the two groupings are spaced apart a distance which will result in an end hole in one row of holes in one grouping of rows of holes having a center-to-center distance of approximately 0.3 inch with the closest end hole in a row of holes in the other grouping of rows of holes.

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15. The breadboard of claim 12 wherein said connection strip portion, said terminal strip portion and said distribution strip portion are all formed in a one piece, integral plate.

16. The breadboard of claim 12 wherein said connection strip portion, said terminal strip portion and said distribution strip portion are formed in separate plates and then assembled together to form the breadboard.

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17. The breadboard of claim 12 being sized to fit directly into a commercially available project box.

18. A method of bread-boarding comprising the steps of: providing a
10 plate made of an insulating material; providing a connection strip section in the plate including a grouping of at least three rows of sets of at least three spaced apart holes in each set in the plate, the centers of the holes in each set being spaced from each other by a predetermined distance defined as a space, groups of at least three connector clips in the plate connected in an at least a three gang
15 grouping each grouping being referred to as a conductive strip, each of which is aligned with and beneath one of rows of sets of holes with all conductive strips being electrically isolated from each other, and all said conductive strips in each row being offset from the conductive strip in an adjacent row by said predetermined distance and the sets being aligned in each row end-to-end with
20 one space between end holes of two adjacent sets in a row, and each row being offset or staggered from each adjacent row by at least one space, such that an array of spaces is formed, with each interior space in the middle row forming a center of a diamond shaped four pin socket, that has a connector clip in the plate at each of its four points or corners, that originates from a different conductive
25 strip.

19. A printed circuit board comprising a plate made of an insulating material and having a connection strip portion including a grouping of at least three rows of sets of at least three spaced apart holes in each set in the plate, the
30 centers of the holes in each set being spaced from each other by a predetermined distance defined as a space, groups of conductive strips in the plate in, or on the underside of, the plate, each conductive strips being aligned with and extending beneath one of the rows of three spaced apart holes with all of the conductive strips being electrically isolated from each other, and all said conductive strips in

each row being offset from a conductive strip in an adjacent row by said predetermined distance and the sets being aligned in each row end-to-end with one space between end holes of two adjacent sets in a row and each row being offset or staggered from each adjacent row by at least one space, such that an

- 5 array of spaces is formed, with each interior space in the middle row forming a center of a diamond shaped four pin socket, that has a connection point on a conductive strip at each of its four points or corners, that originates from a different conductive strip.

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